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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,082	07/30/2003	Hea-Chun Lee	21C-0056	2199

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EXAMINER

HAN, JASON

ART UNIT PAPER NUMBER

2875

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/632,082	Applicant(s) LEE ET AL.	
	Examiner Jason M Han	Art Unit 2875	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 14-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 5 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Claims 1-13 in the reply filed on January 14, 2005 is acknowledged.
2. Claims 14-28 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 14, 2005.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
5. Numerous grammatical errors are replete throughout the application. The examiner has forgone any correction due to the amount, and the specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is again requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

6. Claim 5 is objected to because of the following informalities: Please correct the misspelling "first" in the second line of the claim. Also, it remains unclear to the examiner what exactly is being soldered. Please provide elucidation – the following rejection has been based upon the best interpretation by the examiner. Appropriate correction is required.

7. Claim 8 is objected to because of the following informalities: It remains unclear to the examiner what exactly is being soldered. Please provide elucidation – the following rejection has been based upon the best interpretation by the examiner. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3, 5-8, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Correll, Jr. et al. (U.S. Patent 5720546).

2. With regards to Claim 1, Correll discloses an integrated ballast and lamp connector including:

- at least two lamps [Column 3, Lines 44-48] inherently installed into sockets [Figures 1-11: (4)];

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- the lamps being of a fluorescent bulb type [Column 3, Lines 44-48], which are commonly known in the art and inherently provide a fluorescent layer formed on an inner surface of the lamp body, a discharge gas disposed in the body, first and second electrodes for providing the lamp body with discharge voltages; and
 - a first board [Figure 3: (3)], coupled to the first electrode, for providing the first discharge voltage.
3. With regards to Claim 2, Correll discloses the first board including:
- a first insulated body [Figure 3: (4); Figures 5-7: (17); Column 3, Line 35];
 - at least one conductive pattern [Figures 3, 5-7: (13); Column 3, Lines 18-62] electrically connected to the first electrode of each of the lamps; and
 - at least two first through-holes [Figures 2, 3, 5-7: (21); Column 3, Lines 40-50].
4. With regards to Claim 3, Correll discloses a first connector [Figures 5-7: (20); Column 3, Lines 57-60] installed on the first conductive pattern; and a first terminal [Figures 2, 3, 5-7: (21)], coupled to the first conductive pattern through the first connector, for receiving the first discharge voltage [Column 3, Lines 18-62].
5. With regards to Claim 5, Correll discloses, "The contacts 28 that are associated with prongs of the same fluorescent tube are commoned electrically when connected to a single pad 52b. As shown in FIG. 3, one each of the terminals 36 on the corresponding sockets 4 is shown in a position prior to being connected directly to a corresponding pad 52b. When each of the sockets 4 is received by a corresponding

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socket receiving area, the terminal will engage the corresponding pad 52b to enable a known soldering operation to apply a solder joint, not shown that connects the terminal 36 directly to the corresponding pad 52b [Column 7, Lines 46-56; underlines added by examiner for emphasis].”

6. With regards to Claim 6, Correll discloses a first lamp holder [Figures 2-3, 5-7: (4)] for preventing the first electrode from moving, and the end of the first lamp holder being connected to the first board.

7. With regards to Claim 7, Correll discloses a second board [second bank of sockets: Column 2, Lines 57-60] coupled to the second electrode, for providing the second electrode with the second discharge voltage.

8. With regards to Claim 8, Correll discloses the second board [second bank of sockets: Column 2, Lines 57-60] including:

- a second insulated body [Figure 3: (4); Figures 5-7: (17); Column 3, Line 35];
- at least one second conductive pattern electrically connected to the second electrode of each of the lamps [Figure 2: (5); Column 7, Lines 11-13]; and
- at least two second through-holes [Figures 2, 3, 5-7: (21); Column 3, Lines 40-50] for receiving the second electrode of each of the lamps.

9. With regards to Claim 11, Correll discloses, “The contacts 28 that are associated with prongs of the same fluorescent tube are commoned electrically when connected to a single pad 52b. As shown in FIG. 3, one each of the terminals 36 on the corresponding sockets 4 is shown in a position prior to being connected directly to a corresponding pad 52b. When each of the sockets 4 is received by a corresponding

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socket receiving area, the terminal will engage the corresponding pad 52b to enable a known soldering operation to apply a solder joint, not shown that connects the terminal 36 directly to the corresponding pad 52b [Column 7, Lines 46-56; underlines added by examiner for emphasis].”

10. With regards to Claim 12, Correll discloses a second lamp holder [Figures 2-3, 5-7: (4)] for preventing the second electrode from moving, and the end of the second lamp holder being connected to the second board.

11. With regards to Claim 13, Correll discloses four sockets [Figure 2: (4)] for inherently receiving four lamps.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Correll, Jr. et al. (U.S. Patent 5720546) as applied to Claim 3 above, and further in view of Park (U.S. Patent 6050704).

Correll discloses the claimed invention as cited above, but does not specifically teach the first terminal being connected to an inverter for generating the first discharge voltage.

Park teaches such an inverter [Figure 1A: (16)] for providing voltage for illuminating a lamp [Figure 1A: (11); Column 1, Lines 66-67].

It is obvious that one ordinarily skilled in the art could have modified the lamp assembly of Correll to incorporate the inverter of Park, which is commonly known within the art. Such a configuration is considered a matter of design choice, whereby the references are functionally equivalent in empowering a lamp assembly.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Correll, Jr. et al. (U.S. Patent 5720546) as applied to Claim 8 above.

Correll discloses the claimed invention as cited above, but does not specifically teach the second board having the same features as the first board, including: a second connector installed on the second conductive pattern and having a second terminal, coupled to the second conductive pattern, for receiving the second discharge voltage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have duplicated the first bank of sockets to produce the second bank of sockets, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Such limitations are commonly known within the art [Column 1, Lines 28-35].

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Correll, Jr. et al. (U.S. Patent 5720546) as applied to Claim 9 above, and further in view of Park (U.S. Patent 6050704).

Correll discloses the claimed invention as cited above, but does not specifically teach the second terminal being connected to an inverter for generating the second discharge voltage.

Park teaches such an inverter [Figure 1A: (16)] for providing voltage for illuminating a lamp [Figure 1A: (11); Column 1, Lines 66-67].

It is obvious that one ordinarily skilled in the art could have modified the lamp assembly of Correll to incorporate the inverter of Park, which is commonly known within the art. Such a configuration is considered a matter of design choice, whereby the references are functionally equivalent in empowering a lamp assembly.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art pertinent to the current application, but are not considered exhaustive:

US Patent 5114372 to Fuchs;

US Patent 5138528 to Altman et al;

US Patent 5349508 to Karbaf;

US Patent 5907218 to Altman et al;

US Patent 5908235 to Petrozello et al;

US Patent 6079851 to Altman et al;

US Patent 6217782 to Altman et al;

US Patent 6218782 to Mallalieu;

US Patent 6459203 to Kim;

US Publication 2002/0149713 to Ishida et al;

US Patent 6667780 to Cho.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMH (1/31/2005)



JOHN ANTHONY WARD
PRIMARY EXAMINER